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Claims:**1. A motor comprising:**

a first housing having a radius which is greater than the width of the housing and having a plurality of magnets located thereon;
and

a second housing having an opening therein in which the first housing is at least partially located and having a plurality of magnets located thereon, wherein either of the first or second housings is able to rotate with respect to the other housing;

wherein the magnets on either of the first or the second housing are electromagnets and wherein the electromagnets are energised simultaneously when the motor is in use so that the magnetic force of the magnets causes the one housing to rotate with respect to the other housing.

- 2. A motor according to claim 1 wherein the plurality of magnets are located around a perimeter of the first and/or second housing.**
- 3. A motor according to claim 2 wherein the magnets located on the first housing are of alternating polarities.**
- 4. A motor according to claim 2 wherein the magnets located on the second housing are of alternating polarities.**

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5. A motor according to claim 2 wherein the magnets located on the first housing are of the same polarity.
6. A motor according to claim 2 wherein the magnets located on the second housing are of the same polarity.
7. A motor according to any preceding claim wherein the magnets which are not electromagnets are either permanent magnets or electromagnets.
8. A motor according to any preceding claim wherein the first housing has a ratio of radius to width of at least 2:1.
9. A motor according to claim 8 wherein the first housing has a ratio of radius to width of at least 8:1.
10. A motor according to any of claims 2 to 9 wherein the angle of the forces acting between adjacent ones of the magnets on the first housing and the magnets on the second housing does not exceed 25 degrees.
11. A motor according to any preceding claim wherein the first housing is able to move with respect to the second and housing and wherein the interior of the first housing is formed into a plurality of propeller blades.
12. A motor according to any of claims 2 to 11 wherein both poles of the magnets on either the first or second housing act simultaneously on the magnets of the other housing.
13. A motor according to any preceding claim wherein the motor forms the wheel of a motor vehicle.

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14. A motor according to any preceding claim wherein the polarity of the electromagnets are alternated by a switching mechanism when the motor is in use.
15. A motor according to any preceding claim wherein there are the same number of magnets located on the first and second housings.

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